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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,540	08/26/2003	Milind R. Naphade	YOR920030316US1	2284

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EXAMINER

LIEW, ALEX KOK SOON

ART UNIT	PAPER NUMBER
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2624

MAIL DATE	DELIVERY MODE
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05/31/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/647,540

Applicant(s)

NAPHADE ET AL.

Examiner

Alex Liew

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 6-13 and 15-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

The amendment filed on May 9, 2007 is entered and made of record.

Response to Applicant's Arguments

The applicant argues on page 9 of the amendment, Hanna (US pat no 6,714,665) does not disclose 'propagating the descriptor without prior data regarding the descriptor at second granularity.' The examiner agrees with the applicant, where Hanna propagates descriptor with prior data as shown in figure 6 to 7, where the face is extracted, then extracts the features within the face such as the eyes, nose and mouth.

In the examiner's new search Ishikawa (US pat no 5,933,527) discloses a descriptor acceptance device that accepts a first descriptor associated with a first content granularity (see figure 1 – 34, 44, 54 and 64 – the face area is the first content granularity) and a descriptor propagation device that propagates the first descriptor to a second content granularity that is finer than the first content granularity (see figure 1 – 33, 43, 53 and 63 – the eye brow is the second content granularity), and wherein the descriptor propagation device propagates the first descriptor without prior data regarding the first descriptor at a second granularity (see figure 1 – the searches for the features of a human head is done in parallel configuration, where propagation to finer content does not depend on previous granularity content).

DETAILED ACTION

Claim Rejections - 35 USC § 102

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 – 4, 6 – 13 and 15 – 23 are rejected under U.S.C. 102(b) as being anticipated by Ishikawa ('527).

With regards to claim 1, Ishikawa discloses a descriptor propagation system comprising

- a descriptor acceptance device that accepts a first descriptor associated with a first content granularity (see figure 1 – 34, 44, 54 and 64 – the face area is the first content granularity) and
- a descriptor propagation device that propagates the first descriptor to a second content granularity that is finer than the first content granularity (see figure 1 – 33, 43, 53 and 63 – the eye brow is the second content granularity), and wherein the descriptor propagation device propagates the first descriptor without prior data regarding the first descriptor at a second granularity (see figure 1 – the searches for the features of a human head is done in parallel configuration, where propagation to finer content does not depend on previous granularity content).

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With regards to claim 2, Ishikawa discloses a system of claim 1, further comprising wherein the descriptor propagation device generates a propagation function based upon the first descriptor and the first content granularity and wherein the descriptor propagation device propagates the first descriptor based upon the propagation function and the first descriptor (see figure 1 – 100 is the device which specifies the descriptors).

With regards to claim 3, Ishikawa discloses a system of claim 1, further comprising a repository that stores the first descriptor associated with the first content granularity (the descriptors are inherently stores in the system, eyes, face, mouth and eye brow as shown in figure 7, showing all the features of the face).

With regards to claims 4, 18 and 21, see the rationale and rejection for claims 1 and 2.

With regards to claims 6, 9, 11 and 15, see the rationale and rejection for claim 2.

With regards to claim 7, 13 and 19, see the rationale and rejection for claim 3.

With regards to claim 8, 12 and 22, see the rationale and rejection for claim 1.

With regards to claim 10, see the rationale and rejection for claim 1.

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With regards to claim 16, Ishikawa discloses a method for classifying descriptors comprising

- generating a classification function based upon a first descriptor for a first content at a first content granularity (see figure 1 – 34, 44, 54 and 64 – the face area is the first content granularity),
- accepting a second content granularity that does not include a descriptor (see figure 7 – the cheeks, chin and ears are not extracted from the image) and
- propagating the first descriptor to the second granularity that is finer than the first content granularity based upon the classification function without prior data regarding the first descriptor at the second content granularity (see figure 1 – the searches for the features of a human head is done in parallel configuration, where propagation to finer content does not depend on previous granularity content).

With regards to claims 17, 20 and 23, see the rationale and rejection for claim 16.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alex Liew whose telephone number is (571)272-8623.

The examiner can normally be reached on 9:30AM - 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Mancuso can be reached on (571)272-7695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alex Liew
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5/21/07



JOSEPH MANCUSO
SUPERVISORY PATENT EXAMINER